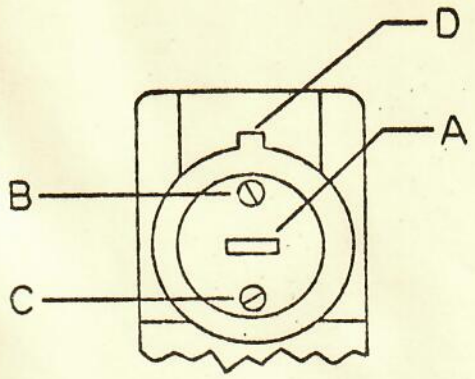
CALIBRATION OF LIMIT CONTROLS



The following procedure is recommended for calibration of the limit controls:

(1) Place a fahrenheit mercury thermometer in the center of the plant bed.

(2) Turn one-half of the lights on. CAUTION: Radiant energy absorption of temperature recording and measuring devices can induce false readings. When the temperature sensing elements are placed near the lamp bank, they should be shielded with a reflective material, (aluminum foil) for protection from direct exposure of the light rays.

(3) Set the temperature control at 70°F. Allow chamber temperature to come to equilibrium at this setting until successive readings of the thermometer remain constant to within ± 2°F. (Note: Thermometer temperature readings should be made as quickly as possible to minimize the effect of room temperature on chambers's temperature when door is open.

(4) After the chamber has reached its temperature setting with one-half lights on at 70°F., turn the high limit control down very slowly with a small screwdriver until lights shut off in chamber. Stop at this point and check the reading on the limit control with that of the referenced thermometer. If the temperature difference is greater than ± 2°F., calibration to the limit control should be made. The control is calibrated by loosening screws "B" and "C" and rotate dial until temperature reading on dial is lined up with indicator "D" and correspond with the temperature reading observed on the referenced thermometer.

(5) Using the same procedure as above, turn the low limit control up very slowly until lights are shut off. Stop and calibrate control if needed.

(6) The limit controls serve as a safe guard against damage to experiments in the event of excessive heat or cold in the chamber. The controls should be set as follows: The low limit controls should be set approximately 10°F. lower than the lowest temperature setting of your temperature program, and the high limit control should be set approximately 10°F. higher than the higest temperature setting of your temperature program.